

Patent Application of Charles M. Lyons for "Motorcycle Wheel Stand for Parking and Transport" continued
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CLAIMS: I claim:

(1) A method of pushing and clamping a motorcycle's wheel for parking or transporting comprising the steps of:

- A. pushing a motorcycle into position where said wheel is centered and stopped from rolling forward with a positive stop, and
- B. applying a pushing force to hold said wheel against said stop,
- C. pushing force is multiplied by leverage not originating from or connected to said motorcycle's weight,

whereby said pushing and holding force is supplied by providing a spring means coupled to leverage so as to multiply said force, and
whereby greatly assisting an operator in pushing, holding, and clamping said motorcycle's wheel for parking or transporting in a secure, vertical position.

(2) The method of claim 1 wherein said spring having a greater predetermined force to push and hold said motorcycle without aid of said leverage.

(3) The method of claim 1 further includes a coating consisting of urethane-based material common to truck bed linings.

(4) A motorcycle wheel stand to aid in parking and transporting a motorcycle comprising:

- A. a means for guiding said motorcycle into said stand, a vertical arm to positively stop said motorcycle from rolling forward, a means to stabilize said stand perpendicular to said guides and a means for connecting said guides with said stop thereby causing said motorcycle to rest its weight on said stand, and
- B. a shoe pivotably mounted to said stand and closely fitting the profile of a motorcycle wheel for pushing said wheel, and
- C. a means of leverage attached to said shoe thereby multiplying force applied to the opposite end of said leverage to push and hold said wheel, and

- D. a means to press against said leverage thereby rotating said shoe with a predetermined force, and
- E. a device to trip or release said force once said wheel passes over said shoe, and
- F. a means to overcome said force and reset said shoe,

whereby said wheel is pushed forward into said stand and held fast against movement for the purpose of parking or transporting said motorcycle, and whereby the force applied to said wheel by the pivotably mounted shoe is sufficient to greatly assist the operator in pushing said motorcycle into said stand and then clamping said wheel securely against movement.

- (5) The motorcycle stand of claim 4 wherein said leverage is replaced with a means for pressing with a greater predetermined force disposed directly to said shoe.
- (6) The motorcycle stand of claim 4 further including a plurality of pressing means with predetermined force.
- (7) The motorcycle stand of claim 4 further including a means to automatically trip or release said shoe once said wheel is at a predetermined location within said stand.
- (8) The motorcycle stand of claim 4 further includes a coating consisting of a urethane-based material common to truck bed linings.

(9) A motorcycle wheel stand for parking or transporting a motorcycle comprising:

- A. a pair of parallel guide rails, a floor plate to connect said rails, a stop attached to a vertical support, and a support mounted perpendicular to said rails for stabilizing a motorcycle wheel, and
- B. a pivotably mounted shoe for pushing and holding said wheel is attached to said stand, and
- C. an air spring of predetermined pressure is disposed to urge and is sandwiched between said stand and a lever to multiply the force of said spring against said shoe, and

- D. a trip lever is mounted pivotably to said rail and resting against said shoe at one end and extending rearward toward the operator at its elevated other end such that by pressing said elevated end of said trip lever said shoe is caused to rotate, and
- E. a cocking piece is disposed to said shoe to reset said shoe to a cocked or ready position,

whereby said wheel is pushed forward into said stand and held fast against movement for the purpose of parking or transporting said motorcycle, and whereby the force applied to said wheel greatly assists the operator in pushing said motorcycle into said stand.

10. The motorcycle stand of claim 9 wherein said lever is replaced by a spring with a greater predetermined pressure whereby said spring is disposed directly to said shoe.

11. The motorcycle stand of claim 10 further includes a plurality of said springs.

12. The motorcycle stand of claim 9 further including an automatic trip or release thereby causing said spring to press against said lever at a predetermined location within said rails.

13. The motorcycle stand of claim 9 further including a coating consisting a urethane-base material common to truck bed linings.